

**55. June 13, 1986 Letter from SSS to PADEP Regarding
Building #2 Closure**

Provided by: USEPA and ALLEGRO

JUN 26 1986

**SOLID
STATE
SCIENTIFIC**



SOLID STATE SCIENTIFIC, INC.

3900 Welsh Road
Willow Grove, PA 19090
(215) 657-8400 TWX 510-661-726

June 13, 1986

Mr. James A. Dolan
Hazardous Waste Coordinator
Commonwealth Of Pennsylvania
Department Of Environmental Resources
520 East Broad Street
Bethlehem, Pa. 18018

Dear Jim:

Solid State Scientific, Inc. has completed the closure of the building #2 location in Montgomeryville as a generator (manufacturing location). In 1985, the treatment and storage facilities were closed and the certification and report were sent to the DER. SSSI has also had the closure of the building as a generator certified by a professional engineer. Enclosed is a copy of the closure certification and the engineer's report.

If there are any further questions, please contact me at (215) 657-8400 extension 3367.

Sincerely,

Josephine Hestand
Josephine Hestand

JH/ck

cc: C.Phillips

encl.

RECEIVED

JUN 17 1986

BETHLEHEM DIST. OFF
DEPT. OF ENV. RES

PROFESSIONAL ENGINEER CERTIFICATION OF CLOSURE

I, Thomas G. Pullar, a Professional Engineer registered pursuant to
(Name)

the Professional Engineers Registration Law, 63 P. S. §§148 et seq.,
hereby certify that I have reviewed the Closure Plan for the
Building 2 - manufacturing facilities at

(Type of Facility)

Solid State Scientific, Inc., Montgomeryville Plant ("facility"),

(Name of Hazardous Waste Facility)

located at the northern corner at the intersection of Commerce Road
and Enterprise Drive, Montgomery Township, Montgomery County, PA.,

(Location)

that I am familiar with the rules and regulations of the Pennsylvania
Department of Environmental Resources pertaining to closure of such
facility, and that I personally have made visual inspections(s) of
the aforementioned facility, in addition to the visitations of my
staff, and that the closure of the aforementioned facility has been
performed in full and complete accordance with the facility's closure
plan approved in writing by the Department of Environmental Resources
on September 1, 1985, and the rules and regulations of the Department
codified at 25 Pa. Code Chapter 75.

Thomas G. Pullar

(Signature)

6/10/86

(Date)

PE-033923-E

(Professional Engineering License Number)

American Resource Consultants, Inc.
450 East Street
Doylestown, PA 18901

(Business Address)

(Seal)

(215) 348-0402

(Telephone Number)

The attached engineering report describes the work performed by ARC,
Inc. and is herein made a part of this closure certification.

SUBJECT: RCRA Inspection - ~~Solid State Scientific~~ - Montgomeryville, Pa DATE: 8/25/87
PAD 002278331

BY: ^{9K} Gregory A. Koltonuk, Environmental Scientist
PA-RCRA Enforcement Section (3HW11)

File

BY: Peter W. Schaul, Chief ^{SP} ~~PA~~ ^{9K}
PA-RCRA Enforcement Section (3HW11)

BASED UPON A REVIEW OF THE RCRA INSPECTION REPORT FOR THE FACILITY
REFERENCED ABOVE, I HAVE DETERMINED THAT NO FURTHER ACTION IS
REQUIRED AT THIS TIME.

HAZARDOUS WASTE INSPECTION REPORT
Generators - Part A

Date of inspection August 6, 1987 Time start 9:00 Time finish 9:10
Name of inspector CAROL A. QUIGLEY
Company, installation name SOLID STATE SCIENTIFIC
Location 12 Commerce Drive, MONTGOMERYVILLE
County MONTGOMERY Municipality MONTGOMERY TWP
Identification number PA D0022 78331
Name of responsible official _____
Title _____
Mailing address _____
Area code and phone no. _____
Name of person interviewed _____
Title _____
Mailing address (if different from above) _____
Area code and phone no. _____

1. Current waste handling method:

- a. ☐ On-site ☐ treatment ☐ storage, ☐ disposal
b. ☐ On-site ☐ use, ☐ reuse, ☐ recycle, ☐ reclaim
c. ☐ Off-site ☐ treatment, ☐ storage, ☐ disposal
d. ☐ Off-site ☐ use, ☐ reuse, ☐ recycle, ☐ reclaim

2. Amount of hazardous waste produced:

- a. NONE kg./mo.
b. _____ kg./yr.

3. Types of hazardous waste produced by Hazardous Waste Number:

4. Are hazardous wastes transported off-site by the generator? ☐ Yes ☐ No

Part C - Comments

Date of inspection 8/6/87 Identification number PA0002278331
Company, Installation name SOLID STATE SCIENTIFIC
County MONTGOMERY Municipality MONTGOMERY TWP.

The building which formerly housed Solid State Scientific is currently for sale.

There was no one at this site.

According to Richard Budwig of Phila. Resins (located within the same industrial park),

Solid State moved out of the location on Commerce Drive in early 1986.

A review of the Regional File found that the generator closure was certified by a P.E. (see attached copies)

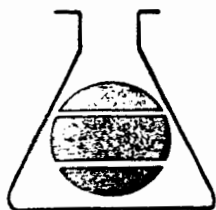
This inspection report is official notification that a representative of the Department of Environmental Resources, Bureau of Solid Waste Management, inspected the above installation. The findings of this inspection are shown in this report. Any violations which were uncovered during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses and review of Department records. Notification will be forthcoming, confirming any violations indicated herein and listing any additional violations.

Person Interviewed (signature) _____ Date _____

Inspector (signature) Carol A. Dugley Date 8/6/87

56. May 26, 1987 Boring Logs for B20, B18, B16, B14, B12, B4 and B2

Provided by: PADEP



CENTURY LABORATORIES, INC.

P.O. Box 248/1501 Grandview Avenue/MidAtlantic Park, Thorofare, NJ 08086
Phone: (609) 848-3939 NJ 800-222-0589

REPORT #: F1173
DATE: 05/26/87

CLIENT DAMES & MOORE
4620 Strut Road
Trevose, PA 19047

SUBJECT Five (5) Samples submitted by the client on 05/08/87, and
identified as: (1) 5/7/87 B2-3, (2) 5/7/87 B7-1, (3) 5/7/87
B8-1, (4) 5/8/87 B16-12, (5) 5/8/87 B17-1.

AUTHORIZATION Thor Helgason - Job #15258-005

PURPOSE Chemical Analysis

PROCEDURE Samples were analyzed in accordance with procedures presented
in the following:

"Test Methods for Evaluating Solid Waste -
Physical/Chemical Methods", 2nd Ed., 1984 U.S.
Environmental Protection Agency (SW-846)

CENTURY LABORATORIES, INC.

Rodney T. Miller

IND. 68058
DRILLING CONTR. RETURNED
MT. LAUREL, NJ
DATE _____ CHK'D BY _____
B-1 (3) REV 11-80

LOCATION OF BORING		JOB NO. 15258-004	CLIENT HOREHAM VALLEY DEVELOPMENT CORP	LOCATION MONTGOMERYVILLE PA
<div>SOLVENT RECOVERY BLDG.</div> <div>BLACKTOP • M03</div> <div>STREAM → • B20</div>		DRILLING METHOD: HOLLOW STEM AUGER		BORING NO. B20
		SAMPLING METHOD: DIRECTLY FROM BLADES		SHEET 1 OF
DATUM		WATER LEVEL 6'0"	TIME 2:00	DATE 5/8/87
ELEVATION		CASING DEPTH	START TIME 1:30	FINISH TIME 2:00
			DATE 5/8/87	DATE →

SAMPLER TYPE	INCHES DRIVEN INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO SAMPLE DEPTH	BLOWS/FT SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH	SURFACE CONDITIONS:
						0		GRASS
		0				1	B20-1	BROWN STIFF CLAY SOME WEATHERED SHALE FRAGMENTS, DRY
						2		
						3		
		0				4	B20-2	WEATHERED SHALE, MOIST AT BOTTOM
						5		
						6		
						7		REFUSAL AT 6'0"
						8		NNH IN HOLE - 0
						9		
						0		
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

James Cook

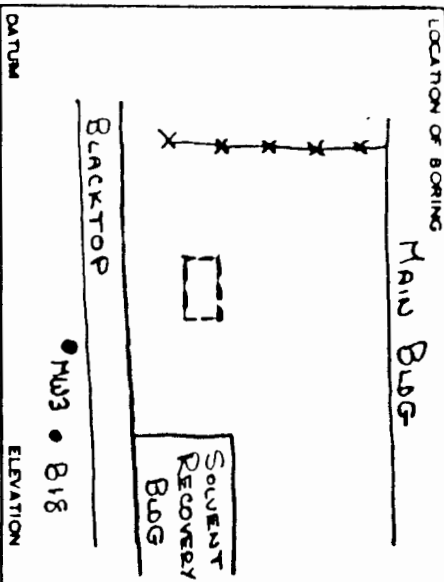
BY VKC
DATE _____ CHK'D BY _____

No.68674

DRILLING CONTR BEECHWOOD
MT. LAUREL, NJ

1 (3) REV 11

SAMPLER TYPE	INCHES DRIVEN INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO SAMPLE DEPTH	BLOWS/FT SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH
						0	CG-1
						1	
						2	
						3	
						4	CG-2
						5	
						6	
						7	
						8	
						9	
						0	
						1	
						2	
						3	
						4	
						5	
						6	
						7	
						8	
						9	
						0	
						1	
						2	
						3	
						4	
						5	
						6	
						7	
						8	
						9	
						0	



JOB NO 15258-004 CLIENT HOESMAN VALLEY LOCATION MONTGOMERYVILLE PA

DRILLING METHOD HOLLOW STEM AUGER BORING NO B18

SAMPLING METHOD FROM AUGER BLADES SHEET 1 OF 1

WATER LEVEL DRY START TIME 11:30 FINISH TIME 11:50

DATE 5/6/87 DATE 5/6/87

CASING DEPTH _____

SURFACE CONDITIONS: GRASS

NOTED BROWN + GRAY STIFF CLAY,
SLIGHT COAR AT 2-3', DRY

BROWN STIFF CLAY, DRY

RECOVER AT 5'

HWS IN HOLE - 5

OK

DRILLING CONTR. BEECHWOOD
MT. LAUREL, NJ

No. 68674

BY KKC

CHK'D BY

DATE

1.3 (REV 11-80)

LOCATION OF BORING

MAIN BLDG

X
X
X
X
X



SOLVENT
RECOVERY
BLDG

BLACKTOP

• MW3

DATUM

B16 •

ELEVATION

JOB NO

15258-004

CLIENT

HORSHAM VALLEY
DEVEL. CORP.

LOCATION

MONTGOMERYVILLE
PA

DRILLING METHOD:

NA

BORING NO.

B16

SHEET

1 OF 1

SAMPLING METHOD:

SPLIT SPOONS - CONTINUOUS

DRILLING

START

FINISH

TIME

TIME

DATE

DATE

WATER LEVEL

3'6"

TIME

10:50

DATE

5/8/87

CASING DEPTH

5/8/87

→

SURFACE CONDITIONS:

GRASS

6" BROWN CLAY SOME BROKEN SHALE (DRY)
6"-3' GRAY PLASTIC CLAY (DRY)

GRAY TO BROWN STIFF CLAY, STRONG
SOLVENT ODOR

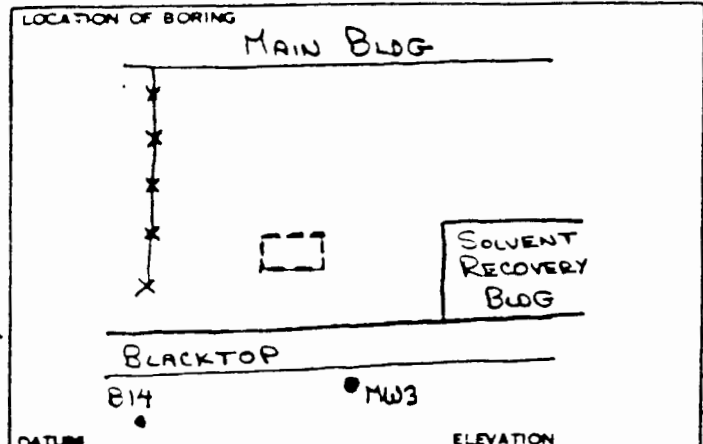
REFUSAL AT 4'6"

HNW IN HOLE - 200

David Cook

DRILLING CONTR. BEECHWOOD
MT. LAUREL, NJ
NO. 68674

DATE _____ CHK'D BY _____
1.31, REV 1



JOB NO 15258-004		CLIENT HORSHAM VALLEY DEVEL. CORP.		LOCATION MONTGOMERYVILLE PA	
DRILLING METHOD:				BORING NO B14	
SAMPLING METHOD: SPLIT SPOON - CONTINUOUS				SHEET 1 OF 1	
WATER LEVEL 3'10"				DRILLING	
TIME 9:50				START TIME 9:30	FINISH TIME 9:50
DATE 5/8/87				DATE 5/8/87	DATE
CASING DEPTH					

SAMPLER TYPE	INCHES DRIVEN RECOVERED	DEPTH OF CASING	SAMPLE NO SAMPLE DEPTH	BLOWS/FT SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH
						0	
						1	BH-1
						2	
						3	
						4	BH-2
						5	
						6	
						7	
						8	
						9	
						0	
						1	
						2	
						3	
						4	
						5	
						6	
						7	
						8	
						9	
						0	

SURFACE CONDITIONS:

GRASS

BROWN CHANGING DOWNWARD TO GRAY
CLAY, LITTLE BROKEN SHALE, NO
ODOR, DRY

GRAY WEATHERED SHALE, SOME CLAY,
WET AT BOTTOM

REFUSAL AT 4'10"

NO. IN HOLE - 5

Laurel Cook

BY DKC
DATE _____ CHK'D BY _____

No. 68674

DRILLING CONTR BEECHWOOD
MT. LAUREL NJ

LOCATION OF BORING				JOB NO		CUBERT HOESMAN Valley DEVEL. CORP.		LOCATION MONTGOMERYVILLE PA	
Main Bug				15258-004				BORING NO B 12	
DATUM				DRILLING METHOD		SAMPLING METHOD		SHEET 1 OF 1	
HILL				SPLIT SPOONS - CONTINUOUS				DRILLING	
BLACKTOP				WATER LEVEL		TIME		START TIME	
MWS				TIME		3:00		FINISH TIME	
B12				DATE		5/16		DATE	
ELEVATION				CASING DEPTH				DATE	
SURFACE CONDITIONS:									
GRASS									
6" BROWN TOPSOIL W. SHALE FRAGMENTS									
12" GRAY CLAY W. WEATHERED SHALE									
REMAINDER - BROKEN BLACK SHALE									
12" GRAY WEATHERED SHALE, SOME CLAY									
12" SAME, BUT BROWN									
12" BROKEN GRAY SHALE									
12" WEATHERED SHALE, SOME CLAY									
BROKEN GRAY SHALE, Dry									
REFUSAL - 7'6"									
HILL IN HOLE - 0									

DRILLING CONTR. BIECHWOOD
MT. LAUREL, NJ

No. 68674

BY WKC

CHK'D BY

DATE

1.131 (REV 11)

LOCATION OF BORING Main Bldg • B4 BLACKTOP • MW3		JOB NO 15258-004	CLIENT HORSHAM VALLEY DEVEL. CORP.	LOCATION MONTGOMERYVILLE PA
		DRILLING METHOD NA	BORING NO. E4	
		SAMPLING METHOD SPLIT SPOONS	SHEET 1 OF 1	
		WATER LEVEL Dry	START TIME 9:30	FINISH TIME 9:50
		TIME	DATE 5/7/07	DATE
		DATE		
		CASING DEPTH		

DATUM	INCHES DRIVEN	INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO.	BLOWS/FT SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH
IN 2							0	B4-1
							1	
							2	
							3	
							4	
							5	
							6	
							7	
							8	
							9	
							0	
							1	
							2	
							3	
							4	
							5	
							6	
							7	
							8	
							9	
							0	

SURFACE CONDITIONS:


BROWN TOP SOIL - SILTY CLAY, dry

B4

REFUSAL AT 1' - CONCRETE FOUNDATION

NOT BACKGROUND

[Signature]



**57. April 8, 1987 Letter from Dames & Moore to HVDC Regarding
Groundwater Sampling, Analysis, and
Data Evaluation Building No. 2**

Provided by: PADEP

Dames & Moore



4620 Street Road
Trevose, PA 19047-6612
(215) 364-7910

April 8, 1987

Horsham Valley Development Corp.
107 Lakeside Drive
Horsham, Pennsylvania 19044

Attention: Mr. Ken Bissinger

Re: Report
Ground Water Sampling, Analysis
and Data Evaluation
Building No. 2
Montgomeryville, Pennsylvania

Dear Mr. Bissinger:

Dames & Moore is pleased to present this report which contains the results of the ground water sampling, analysis and data evaluation at the Solid State Scientific, Inc. (SSSI) Building No. 2 located in Montgomeryville, Pennsylvania. The purpose of this work was to evaluate potential adverse environmental impacts to the ground water resulting from past practice at Building 2.

Ground Water Sampling

On March 17, 1987, Dames & Moore collected ground water samples from the four monitoring wells located on the Building No. 2 property. These wells are numbered MW-2 through MW-5 as shown on Figure 1. The depth from the top of the 4" PVC casing to the water surface was measured in each well. The total depth of each well was also measured. Three to five well volumes were then purged from each well prior to sampling. The samples were transported to SRE Analytics, Inc. in Hatboro, Pennsylvania and analyzed for priority pollutant volatile organic compounds (VOC's) and priority pollutant metals.

Analysis

The laboratory analyses of the ground water samples obtained from MW-2 through MW-5 is provided in the appendix.

CENTURY LABORATORIES, INC.
REPORT OF RESULTS

Volatile Organics Analysis

Client: DAMES&MOORE

Report #: F1173

Sample ID: B17-1

	ug/kg		ug/kg
Chloromethane	13 U	1,2-Dichloropropane	8 U
Bromomethane	13 U	trans-1,3-Dichloropropene	6 U
Vinyl chloride	13 U	Trichloroethene	1200
Chloroethane	13 U	Chlorodibromomethane	4 U
Methylene chloride	4 U	1,1,2-Trichloroethane	6 U
Benzene	6 U	cis-1,3-Dichloropropene	6 U
1,1-Dichloroethene	4 U	2-Chloroethyl vinyl ether	13 U
1,1-Dichloroethane	6 U	Bromoform	6 U
trans-1,2-Dichloroethene	210	Chloroform	2 U
1,2-Dichloroethane	4 U	Tetrachloroethene	17
1,1,2,2-Tetrachloroethane	9 U	1,1,1-Trichloroethane	5 U
Toluene	9 B (B=2)	Carbon tetrachloride	4 U
Chlorobenzene	8 U	Ethylbenzene	384
Bromodichloromethane	3 U	1,3-Dichlorobenzene	6 U
1,2-Dichlorobenzenes	47	1,4-Dichlorobenzene	6 U

Data Reporting Qualifiers

- U Indicates compound was analyzed for but not detected (eg. 10 U), based on necessary concentration/dilution. The number is the minimum attainable detection limit for the sample.
- B This flag is used when the analyte is found in blank as well as a sample. It indicates possible/probable contamination and warns the data user to take appropriate action.
- J Indicates an estimated value, based on assumption of a 1:1 response for tentatively identified compounds, or when mass spectral data indicate the presence of a compound at levels below the specified detection limit.

CENTURY LABORATORIES, INC.
REPORT OF RESULTS

Volatile Organics Analysis

Client: Dames & Moore

Report #: F1173

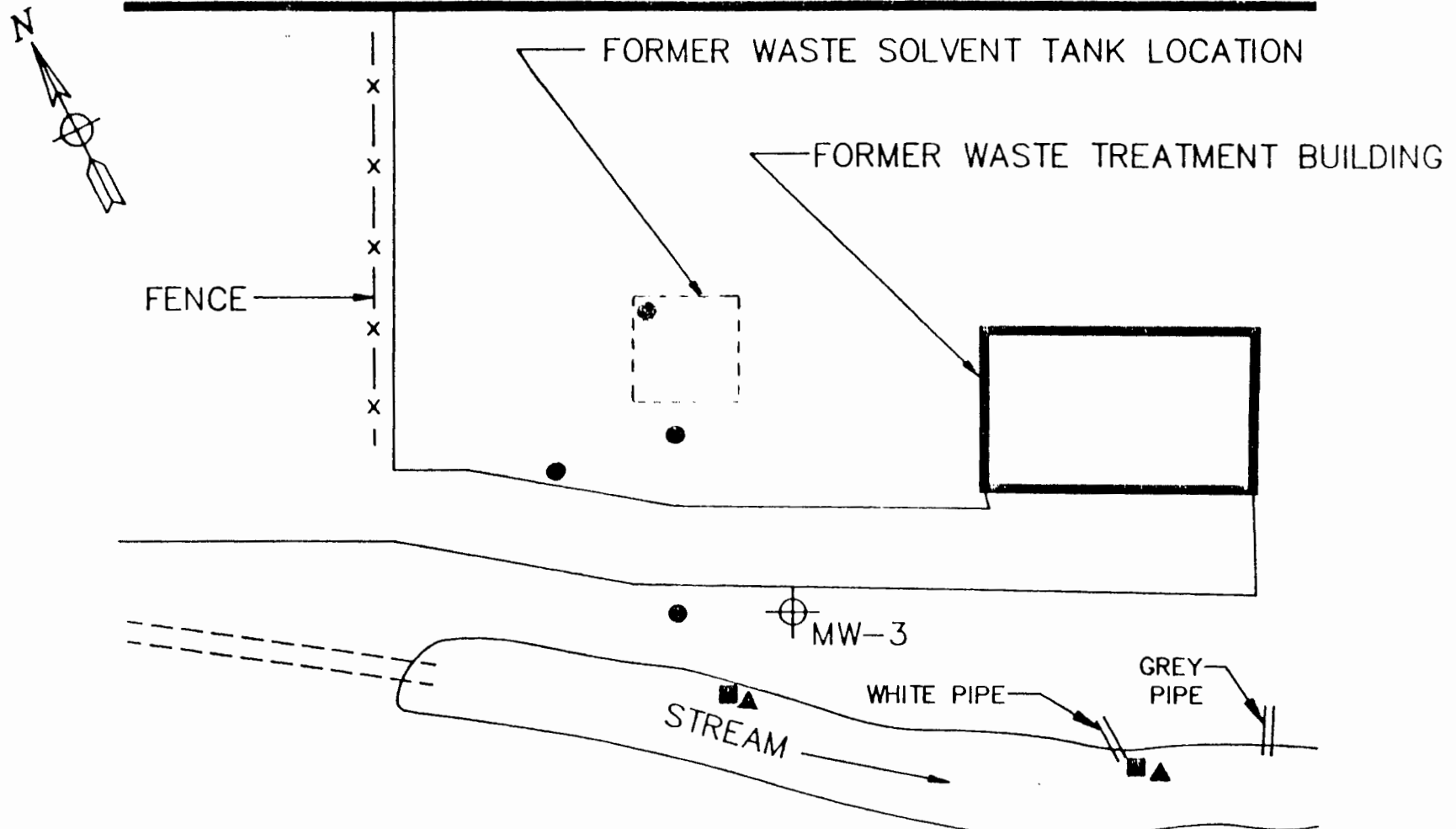
Sample ID: B8-1

	ug/kg		ug/kg
Chloromethane	6200 U	1,2-Dichloropropane	3700 U
Bromomethane	6200 U	trans-1,3-Dichloropropene	3100 U
Vinyl chloride	6200 U	Trichloroethene	860 U
Chloroethane	6200 U	Chlorodibromomethane	1900 U
Methylene chloride	1700 U	1,1,2-Trichloroethane	3100 U
Benzene	2700 U	cis-1,3-Dichloropropene	3100 U
1,1-Dichloroethene	1700 U	2-Chloroethyl vinyl ether	6200 U
1,1-Dichloroethane	2900 U	Bromoform	2900 U
trans-1,2-Dichloroethene	10000	Chloroform	1000 U
1,2-Dichloroethane	1700 U	Tetrachloroethene	2600 U
1,1,2,2-Tetrachloroethane	4300 U	1,1,1-Trichloroethane	2400 U
Toluene	1500 J, B (B=150)	Carbon tetrachloride	1700 U
Chlorobenzene	3700 U	Ethylbenzene	33000
Bromodichloromethane	1400 U	1,3-Dichlorobenzene	3100 U
		1,2-Dichlorobenzene	860 J
		1,4-Dichlorobenzene	3100 U

Data Reporting Qualifiers

- U Indicates compound was analyzed for but not detected (eg. 10 U), based on necessary concentration/dilution. The number is the minimum attainable detection limit for the sample.
- B This flag is used when the analyte is found in blank as well as a sample. It indicates possible/probable contamination and warns the data user to take appropriate action.
- J Indicates an estimated value, based on assumption of a 1:1 response for tentatively identified compounds, or

BUILDING NO. 2



PROPOSED BORING LOCATIONS FOR COMPOSITE SOIL SAMPLING
AND PROPOSED STREAM/SEDIMENT SAMPLING LOCATIONS

- = PROPOSED BORING
- = PROPOSED STREAM SAMPLE
- ▲ = PROPOSED SEDIMENT SAMPLE

SSSI BUILDING NO.2
MONTGOMERYVILLE, PENNSYLVANIA
APPROXIMATE SCALE: 1" = 10'-0"

Dames & Moore

FIGURE 1

REPORT NARRATIVE

The following should be taken into consideration by the end user of these results:

Samples B 2-3 and B8-1 were analyzed for volatiles by GC/MS method 624 and were extracted with methanol as a medium level analysis. This procedure involves extracting 4 grams of sample with 10 ml of methanol, followed by purging 100 ul of this solution in 10 ml of water. In applying the dilution factor of 125 fold there appears to be a large concentration of toluene in the methanol blank. This is not the case, the blank exhibited an absolute amount of toluene less than 10 nanograms which correlates to a concentration of 2 ppb in the method blank. Every attempt was made to obtain a clean methanol blank, but very low levels of background toluene remained.

RALPH A WERT, P.E., P.L.S.
HERBERT H. METZ, JR., P.E., P.L.S.
JOHN R HUNT, P.E.
BARRY L WERT, P.E., P.L.S.
JEFFREY A WERT, P.E., P.L.S.
EDWARD J. BROGLEY, Chief of Survey

Herbert H. Metz, Inc.

CIVIL ENGINEERS & SURVEYORS

P.O. BOX 647
410 DERSTINE AVENUE
LANSDALE, PENNSYLVANIA
19446

Phone: 855-3111
855-1686

March 27, 1987

Dames & Moore
4620 Street Road
Trevose, PA 19047-6612

Attention: Thor Helgason, Staff Engineer

Dear Mr. Helgason:

The following are the well elevations on S.S.S.
Building #2, Montgomery, PA:

WELL	#2	382.33
WELL	#3	383.44
WELL	#4	384.43
WELL	#5	389.71

Elevations were taken on top of 4" P.V.C. inside
of riser.

If you have any further questions or need further
assistance, feel free to call.

Sincerely,

HERBERT H. METZ, INC.

Edward J. Brogley / beh
Edward J. Brogley,
Chief of Survey

EJB:beh

**58. June 3, 1987 Report Limited Subsurface Environmental
Evaluation Building #2**

Provided by: PADEP

Dames & Moore



4620 Street Road
Trevose, PA 19047-6612
(215) 364-7910

June 3, 1987

Horsham Valley Development Corp.
107 Lakeside Drive
Horsham, Pennsylvania 19044

Attention: Mr. Ken Bissinger

Re: Report
Limited Subsurface
Environmental Evaluation
Building No. 2
Montgomeryville, Pennsylvania

Dear Mr. Bissinger:

1.0 INTRODUCTION

Dames & Moore is pleased to present this report which contains the results of our environmental sampling and analysis performed in the vicinity of monitoring well MW-3 at the former Solid State Scientific Inc. (SSSI) Building No. 2 site, Montgomeryville, Pennsylvania.

This study was performed in accordance with our April 30, 1987 confirming proposal that was previously authorized by Horsham Valley Development Corp. (HVDC) on April 21, 1987.

1.1 OBJECTIVES

The objectives of this study were to:

- o evaluate the areal and vertical extent of contaminated soil in the vicinity of monitoring well MW-3; and
- o present conclusions and remedial action recommendations.

1.2 SCOPE OF WORK

In order to accomplish the objectives, Dames & Moore's scope of work consisted of the following tasks:

- Task 1 - Soil Borings
- Task 2 - Laboratory Analysis
- Task 3 - Data Evaluation and Submittal of this Report

10/10/10

2.0 FIELD INVESTIGATION

2.1 SOIL BORINGS

The former SSSI Building No. 2 site is located at the northernmost corner of the intersection of Enterprise Road and Commerce Drive in Montgomeryville, Pennsylvania. Figure 1 shows a plot plan of the building, including the area of this study.

On May 7 and 8, 1987, twenty shallow soil borings were drilled in the vicinity of MW-3, as shown on Figure 2. These borings were drilled to refusal which occurred at depths ranging from 1 to 8.3 feet. The borings were drilled by Beechwood Drilling, Inc., Laurel Springs, New Jersey under the field direction of Dames & Moore. Logs of the twenty borings appear in Appendix A. Continuous split-spoon soil samples from the ground surface downward were obtained in all borings with the exceptions of B-1, B-18, B-19 and B-20. B-1 was an initial exploratory boring drilled to obtain information on drilling conditions and refusal depths likely to be encountered during the investigation. Borings B-18, B-19, and B-20 were not sampled with the split-spoon sampler due to mechanical difficulties with the cathead and hammer on the drill rig. Soil samples were obtained directly from the auger blades in Borings B-1, B-18, B-19, and B20.

Each soil sample obtained was screened in the field for organic vapors with a portable Photoionization Detector (PID) manufactured by HNu Systems, Inc., Newton, Massachusetts. The PID provides a relative indication of the presence of organic vapors in soil samples. Results are presented on the boring logs provided in Appendix A, and on Figure 3.

2.2 LABORATORY ANALYSIS

Five soil samples, one each from Borings B-2, B-7, B-8, B-16, and B-17, were sent to Century Laboratories, Thorofare, New Jersey for analysis of volatile organic compounds (VOCs). The five samples were selected based on their field measurements (1 to 500 ppm) for total volatile organic compounds. The results of the laboratory analyses are summarized below:

<u>Boring</u>	<u>Sample No.</u>	<u>Composite Sample Depth (ft)</u>	<u>Volatile Organic Compounds Detected</u>	<u>Concentration ug/kg (ppb)</u>
B-2	B2-3	4.5-6.5	trans-1,2-Dichloroethene	430
			Toluene	70*
			Ethylbenzene	760*
			1,2-Dichlorobenzene	420*
				1,630 ug/kg total
B-7	B7-1	0.5-2.5	Toluene	1*
			Tetrachloroethene	21
			Ethylbenzene	1*

Boring	Sample No.	Composite Sample Depth (ft)	Volatile Organic Compounds Detected	Concentration ug/kg (ppb)
B-8	B8-1	0.5-2.5	trans-1,2-Dichloroethene	10,000
			1,2-Dichlorobenzene	860*
			Toluene	1,350*
			Ethylbenzene	33,000
B-16	16-2	2.5-4.0	Toluene	60*
			Trichloroethene	1,400
			Ethylbenzene	1,600
B-17	B17-1	0.5-2.5	trans-1,2-Dichloroethene	210
			1,2-Dichlorobenzene	47
			Toluene	7
			Trichloroethene	1,200
			Tetrachloroethene	17
			Ethylbenzene	384

Notes: * indicates presence of compound below specified detection limit and estimated concentration of that compound.

The Laboratory reports are provided in Appendix B.

3.0 DISCUSSION

3.1 HYDROGEOLOGY

In general, the area of this investigation consists of approximately three to eight feet of overburden overlying bedrock. The overburden is composed primarily of mottled brown silty clay, with shale fragments near the bedrock surface. The bedrock underlying the area is thick-bedded argillite of the Lockatong Formation. The depth to water in the overburden, as measured during the drilling on May 7 and 8, 1987, ranged from 1.5 feet in Boring B-2 to 5.5 feet in Boring B-6. No water level was encountered in Boring Nos. B-10, B-12, B-13, B-18, B-19, and B-20.

Based on this investigation, it appears that the existing monitoring well MW-3, with a bottom depth of approximately 12 feet below ground surface, has a screened interval entirely in the bedrock or partially in the bedrock and partially in the overburden. The analysis of water obtained from this well on March 17, 1987, indicated 1860 ug/l of total volatile organic compounds. According to Mr. Quinn of the North Wales Water Authority, the public well nearest Building 2 is located near the

intersection of Line Street and Cowpath Road in Montgomeryville. This location is approximately 2.7 miles northwest of Building No. 2. This well, referred to as Well No. 17, is approximately 600 feet deep. The information provided by Mr. Quinn supersedes previous information provided to Dames & Moore by the North Wales Water Authority regarding the location of the public well nearest Building No. 2. Mr. Quinn stated that he is not aware of any individual, residential wells in the Montgomeryville area and stated that the North Wales Water Authority does not keep records of residential wells. Although Dames & Moore has no reason to believe any such wells exist, we have not conclusively established their absence. *see the Survey in Harrisburg.*

3.2 EXTENT OF OVERBURDEN CONTAMINATION

depth
Based upon the field investigation and laboratory analysis, it appears that an area of approximately 800 square feet is contaminated with volatile organic compounds in concentrations greater than 1 ppm. The areal extent of the contaminated area, as shown on Figure 4, was evaluated in the field with the PID and supported with laboratory analysis of five selected samples. Most of the borings within the zone of contamination exhibited the highest PID readings near refusal depth. In Borings B-9 and B-17, an orange liquid was observed at the bottom of the borehole. This liquid may represent a floating phase of organic compounds on the water within the borehole. These observations indicate that the contamination extends vertically to the bottom of the overburden.

This study did not evaluate the effects of the VOCs in the soil on the pond or the stream. The stream appears to be perched based on the water levels measured in nearby borings. No sheen, discoloration, or other visual indication of adverse environmental impacts was observed in the stream from the pond inlet to the small white pipe protruding from the stream bank. On May 7 and 8, 1987 during the field investigation, large goldfish, approximately 4 to 6 inches long, were observed swimming in the pond and in the stream. A small sheen was observed, however, downstream of the white pipe. Liquid was observed exiting this pipe, dropwise, on May 8, 1987.

4.0 RECOMMENDATIONS

4.1 SOURCE REMOVAL

Based on our investigation and evaluation of the source of contamination in monitoring well MW-3, we recommend total removal of the contaminated soil, thus removing the source of

further potential contamination. Other remedial alternatives considered were on-site vacuum extraction of volatile organic vapors and bio-reclamation. However, based on the nature and extent of the contaminated soil, it is our opinion that total removal represents the most feasible alternative, technically and economically.

The removal should extend throughout the depth of the overburden and encompass the area shown on Figure 4. Based on an areal extent of 800 square feet and an average overburden depth of six feet, approximately 180 cubic yards of contaminated soil should be removed. During the excavation and removal process, care must be taken not to impact the stream. ~ Dames & Waterways, Soil Conservation people.

The white pipe extending out of the stream bank over the stream should be removed to its point of inflow.

4.2 WELL INSTALLATIONS AND CONTINUED MONITORING

We recommend that three bedrock monitoring wells be installed at the locations shown on Figure 5. The purpose of these wells is to evaluate whether VOCs from the contaminated soil are migrating into the bedrock and moving off-site. These wells should be screened a minimum of ten feet into the bedrock aquifer and the screened interval should be sealed from the overburden. →

These three monitoring wells, along with the four existing monitoring wells, should be sampled and analyzed for VOCs on a quarterly basis for a period of one year following the removal of the contaminated soil.

5.0 CLOSURE

Dames & Moore appreciates the opportunity to be of service to the Horsham Valley Development Corp. If you have any questions, please contact us.

Very truly yours,

DAMES & MOORE
A Professional Limited Partnership

David K. Cook

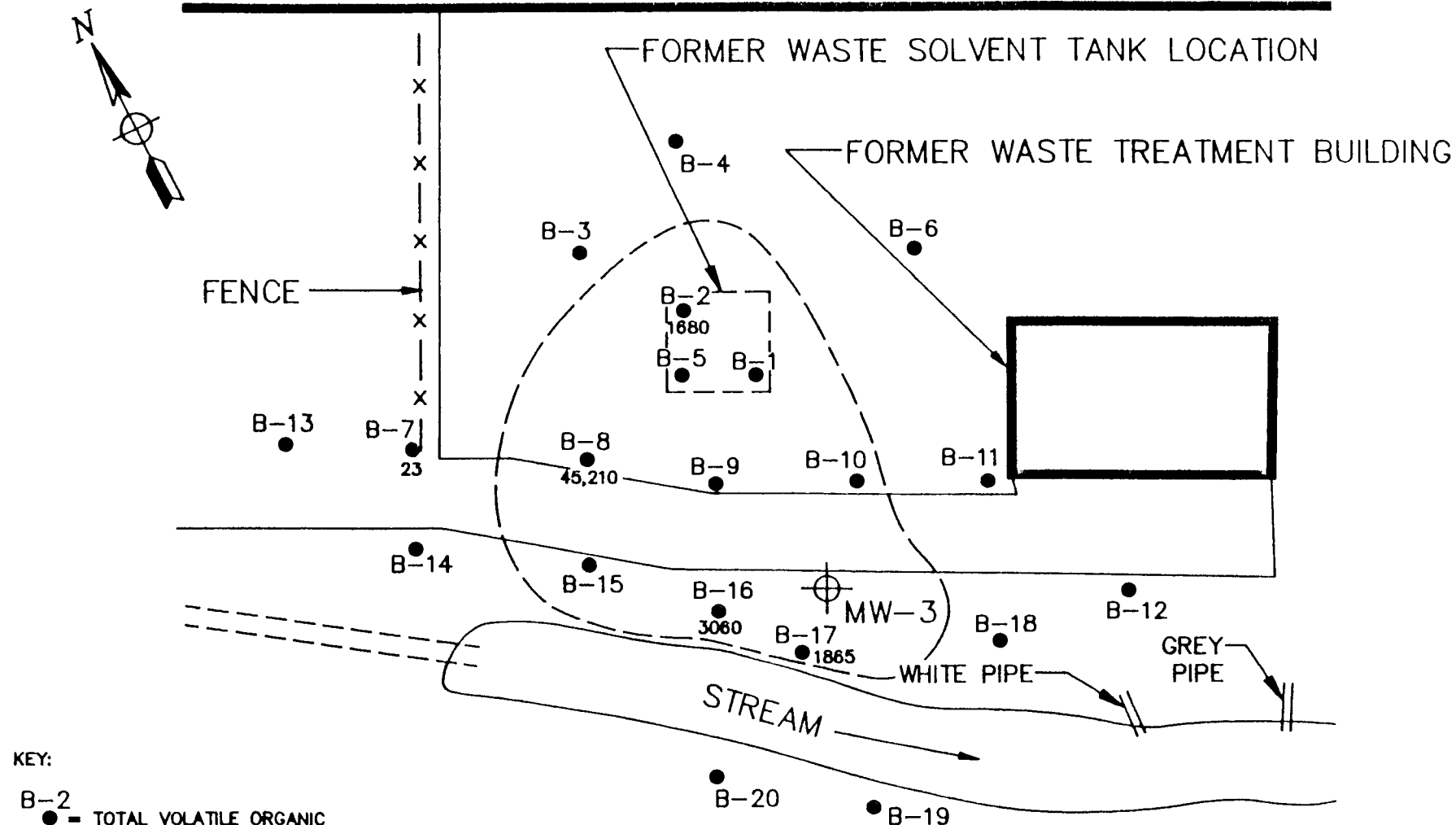
David K. Cook
Associate

Thor Helgason

Thor Helgason
Project Manager

DKC/TH:jw
0953R

BUILDING NO. 2

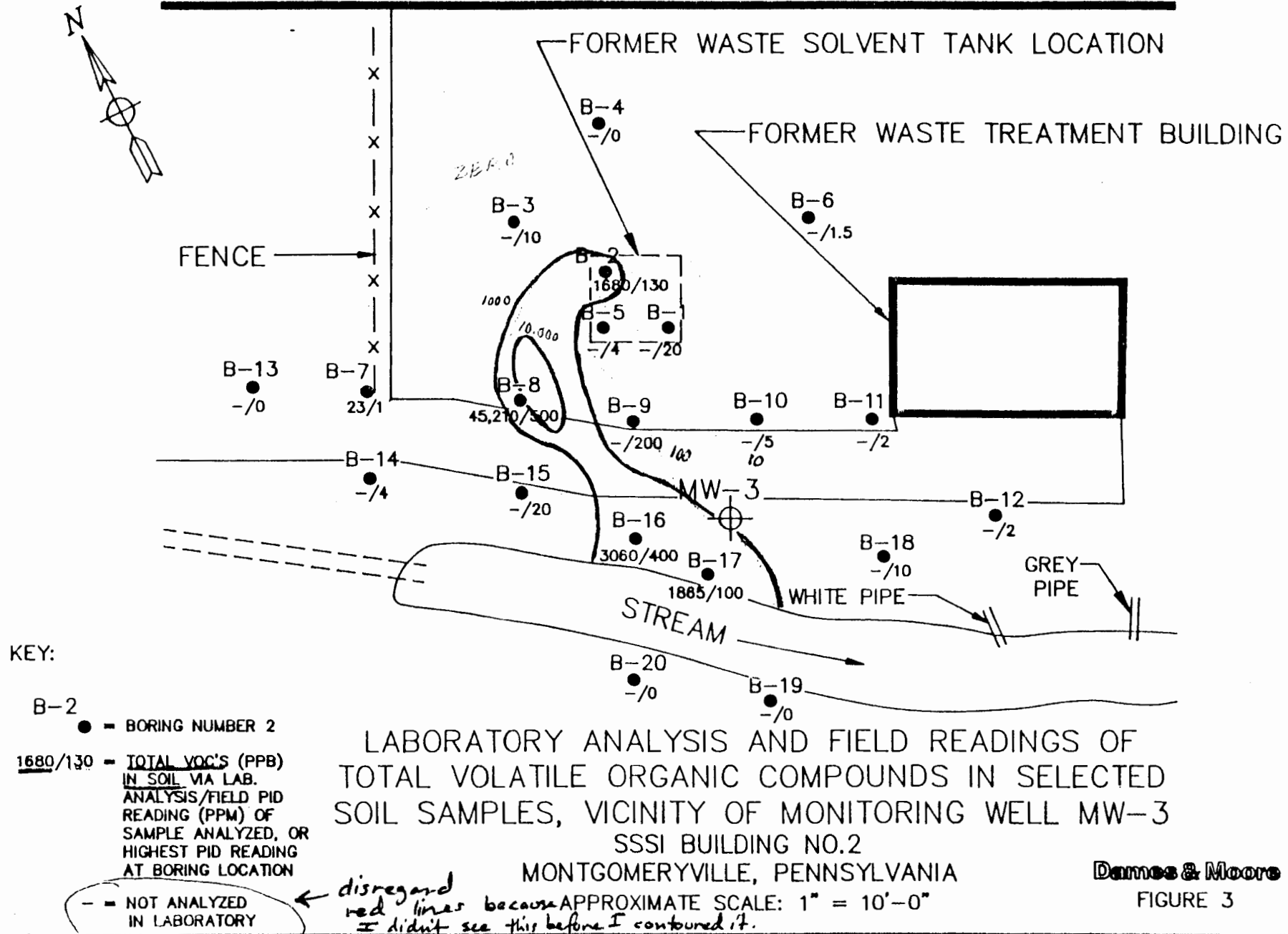


AREAL EXTENT OF TOTAL VOLATILE ORGANIC
COMPOUNDS GREATER THAN 1000 PPB IN THE SOIL
IN THE VICINITY OF MONITORING WELL MW-3

SSSI BUILDING NO.2
MONTGOMERYVILLE, PENNSYLVANIA
APPROXIMATE SCALE: 1" = 10'-0"

Dames & Moore
FIGURE 4

BUILDING NO. 2



SRE ANALYTICS, INC.

2910 TURNPIKE DRIVE
HATBORO, PENNSYLVANIA 19040
215-674-1202

REPORT OF ANALYSIS

March 24, 1987

Dames & Moore
4620 Street Road
Trevose, PA 19407-6612
Attention: Thor Helgason

Re: Four (4) samples
SRE Ref #: 1037-031 thru 034
Sample Source: HVDC
Project Title: Pre Acq.
Job No: 15258-003
Received: 3/17/87

SRE Ref #	Sample Description
1037-031	MW-2
1037-032	MW-3
1037-033	MW-4
1037-034	MW-5

All samples described above were tested in accordance with EPA and APHA analytical procedures with the obtained test data reported on the enclosed summary sheets.

Respectfully submitted,

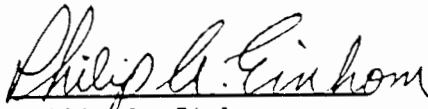

Philip A. Einhorn
President

TABLE 1

WATER TABLE ELEVATIONS MEASURED ON
MARCH 17, 1987

<u>Well No.</u>	<u>Depth from Top of PVC Casing to Water Surface (ft.)</u>	<u>Depth from Top of PVC Casing to Bottom of Well (ft.)</u>	<u>Elevation of Top of PVC Casing (ft.)</u>	<u>Elevation of Water Surface (ft.)</u>
MW-2	6.06	14.20	382.33	376.27
MW-3	4.93	14.16	383.44	378.51
MW-4	2.68	13.45	384.43	381.75
MW-5	7.17	13.42	389.71	382.54

All elevations refer to National Geodetic Vertical Datum, 1929

0822R

Client: Dames & Moore
 Sample Source: HVDC
 Job No: 15258-003
 Project Title: Pre Acq.

SRE Analytics, Inc.
 (215)-674-1202
 Analyst: P.A. Einhorn
 Date: 3/24/87

SUMMARY OF ANALYTICAL RESULTS
 EPA Method 624 - Volatiles by GC/MS

All values are reported in ug/l.

COMPOUND	Client #: MW-2	MW-3	MW-4	MW-5	MDL
	SRE #: 1037-031	1037-032	1037-033	1037-034	
Benzene	-	-	-	-	1.0
Bromodichloromethane	-	-	-	-	1.0
Bromoform	-	-	-	-	1.0
Bromomethane	-	-	-	-	1.0
Carbon tetrachloride	-	<MDL	<MDL	<MDL	1.0
Chlorobenzene	-	-	-	-	1.0
Chloroethane	-	-	-	-	1.0
2-Chloroethyl vinyl ether	-	-	-	-	1.0
Chloroform	-	<MDL	1.0	-	1.0
Chloromethane	-	-	-	-	1.0
Dibromochloromethane	-	-	-	-	1.0
1,2-Dichlorobenzene	-	-	-	-	1.0
1,3-Dichlorobenzene	-	-	-	-	1.0
1,4-Dichlorobenzene	-	-	-	-	1.0
<u>1,1-Dichloroethane</u>	<u>3.3</u>	<u>2.7</u>	<MDL	-	1.0
<u>1,2-Dichloroethane</u>	-	<u>26.8</u>	-	-	1.0
<u>1,1-Dichloroethene</u>	-	<u>2.9</u>	-	-	1.0
<u>trans-1,2-Dichloroethene</u>	<u>1.9</u>	<u>1075</u>	<u>2</u>	<u>2.7</u>	1.0
1,2-Dichloropropane	-	-	-	-	1.0
cis-1,3-Dichloropropene	-	-	-	-	1.0
trans-1,3-Dichloropropene	-	-	-	-	1.0
<u>Ethyl benzene</u>	-	<u>19.5</u>	-	-	1.0
Methylene chloride	-	-	-	-	1.0
1,1,2,2-Tetrachloroethane	-	-	-	-	1.0
<u>Tetrachloroethene</u>	-	<u>3.6</u>	-	-	1.0
<u>Toluene</u>	-	<u>3.8</u>	-	-	1.0
<u>1,1,1-Trichloroethane</u>	<MDL	<u>7.1</u>	<u>6.6</u>	<u>16.1</u>	1.0
<u>1,1,2-Trichloroethane</u>	-	-	-	-	1.0
<u>Trichloroethene</u>	<u>2.2</u>	<u>636.4</u>	<u>3.2</u>	<u>21.6</u>	1.0
<u>Vinyl chloride</u>	-	<u>82.6</u>	-	-	1.0

Client: Dames & Moore
Sample Source: HVDC
Job No: 15258-003
Project Title: Pre Acq.

SRE Analytics, Inc.
(215) 674-1202
Analyst: R. C. Smith
Date: 3/24/17

SUMMARY OF ANALYTICAL RESULTS

Sampling Points

TEST PARAMETER	Client #: SRE #:	MW-2 1037-031	MW-3 1037-032	MW-4 1037-033	MW-5 1037-034	*MDL
----------------	---------------------	------------------	------------------	------------------	------------------	------

Priority Pollutant Metals, mg/l

Antimony, as Sb	<MDL	<MDL	<MDL	<MDL	0.05
Arsenic, as As	<MDL	0.001	<MDL	<MDL	0.0005
Beryllium, as Be	<MDL	<MDL	<MDL	<MDL	0.05
Cadmium, as Cd	0.006	<MDL	<MDL	0.004	0.002
Chromium, as Cr	<MDL	<MDL	<MDL	<MDL	0.010
Copper, as Cu	0.01	<MDL	<MDL	<MDL	0.010
Lead, as Pb	0.01	<MDL	<MDL	<MDL	0.010
Mercury, as Hg	<MDL	<MDL	<MDL	<MDL	0.0005
Nickel, as Ni	<MDL	<MDL	<MDL	<MDL	0.01
Selenium, as Se	<MDL	<MDL	<MDL	<MDL	0.0005
Silver, as Ag	<MDL	<MDL	<MDL	<MDL	0.010
Thallium, as Tl	<MDL	<MDL	<MDL	<MDL	0.10
Zinc, as Zn	0.04	0.014	<MDL	0.036	0.010

OK

BUILDING NO.2

MW-2

FORMER WASTE SOLVENT TANK LOCATION

FORMER WASTE TREATMENT BUILDING

COMMERCE DRIVE

MW-3

STREAM

AREA OF THIS STUDY

ENTERPRISE ROAD

KEY:



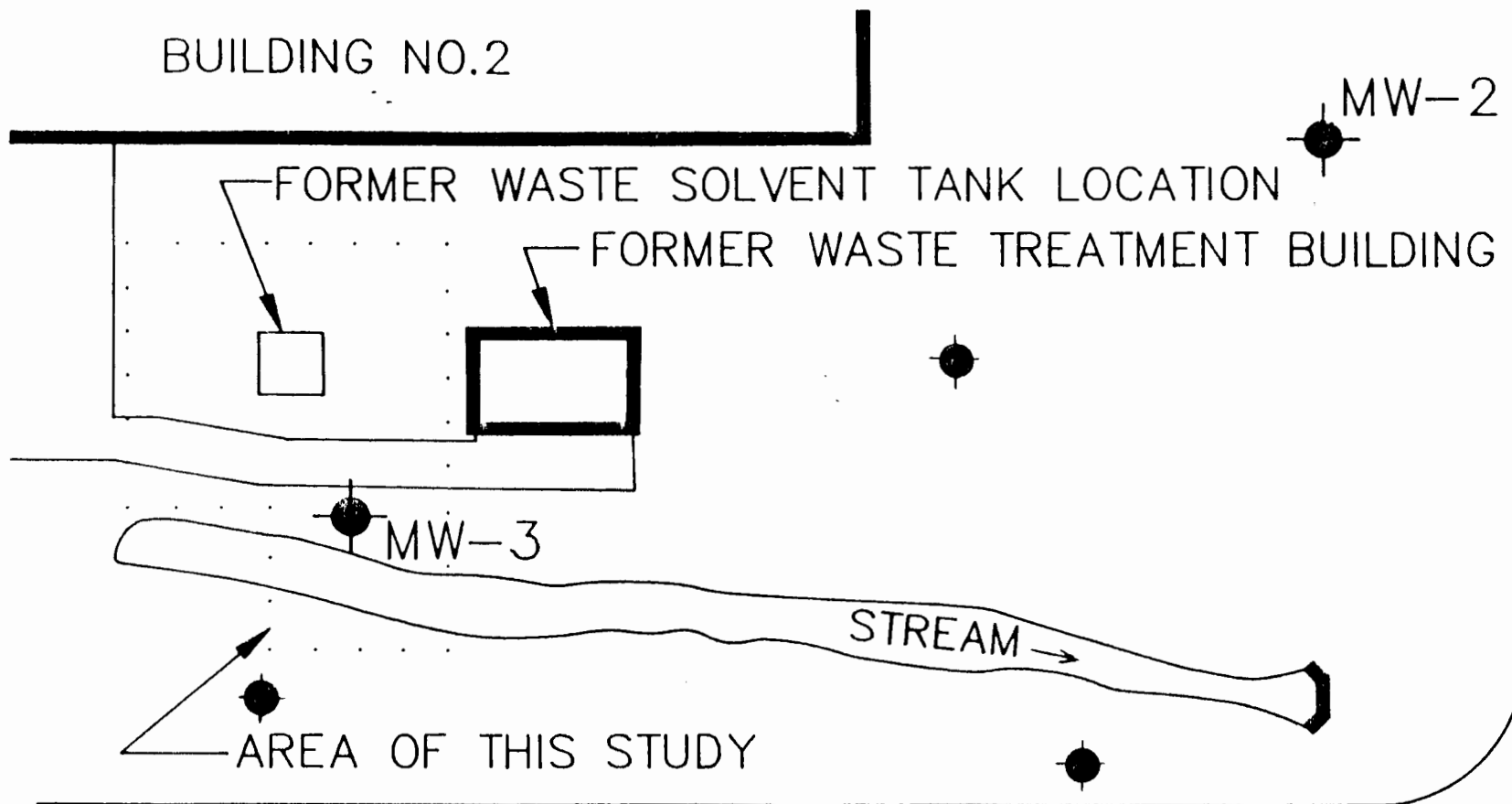
= RECOMMENDED BEDROCK
MONITORING WELL LOCATION

RECOMMENDED LOCATIONS FOR ADDITIONAL
BEDROCK MONITORING WELLS

SSSI BUILDING NO. 2 MONTGOMERYVILLE, PENNSYLVANIA

Dames & Moore

FIGURE 5



APPENDIX A

Logs of Borings

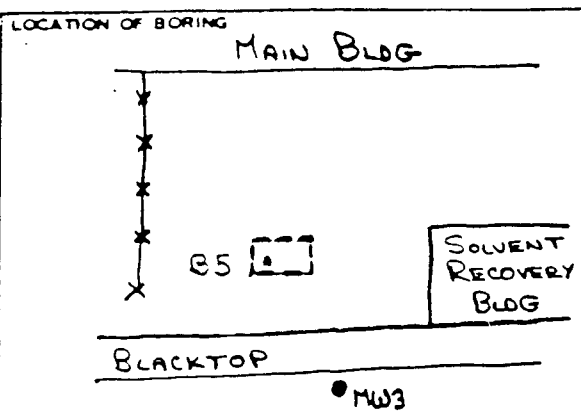
DRILLING CONTR BEECHWOOD
MT. LAUREL, NJ

No. 68674

UKG

BY _____
DATE _____
CHK'D BY _____

1.131 (REV 11.80)



DATUM HNu ELEVATION

SAMPLER TYPE	INCHES DRIVEN	INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO	BLOWS/FT SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH
							0	
							1	
							2	
							3	
							4	
							5	
							6	
							7	
							8	
							9	
							0	
							1	
							2	
							3	
							4	
							5	
							6	
							7	
							8	
							9	
							0	

JOB NO 15258-004	CLIENT HORSHAM VALLEY DEVEL. CORP.	LOCATION MONTGOMERYVILLE PA
DRILLING METHOD: NA		BORING NO. B5
SAMPLING METHOD SPLIT SPOONS - CONTINUOUS		SHEET 1 OF 1
WATER LEVEL 2'	TIME 10:20	START TIME 10:00
DATE 5/7/87	CASING DEPTH	FINISH TIME 10:20
		DATE 5/7/87

SURFACE CONDITIONS:
WITHIN OUTLINE OF WASTE SOLVENT TANK AREA

NOTE: MADE 2 ATTEMPTS

- ① - 3" TOPSOIL
VOID 3" TO ~ 4' 5" inside of tank?
REFUSAL (WOOD?) at 4' 6" ← bottom of
4' - 4' 6" - WEATHERED ROCK/CLAY tank
(SAMPLE B5-1, 4-4 1/2)
- ② - 3" TOPSOIL
VOID 3" TO ~ 2' inside of tank?
2' - 4' CLAY/WEATHERED ROCK
REFUSAL (WOOD?) at 4'
(SAMPLE B5-2, 2-4')

HNu IN HOLE - 4 ppm

need history of site -
was tank clean closed
or was it closed at all?

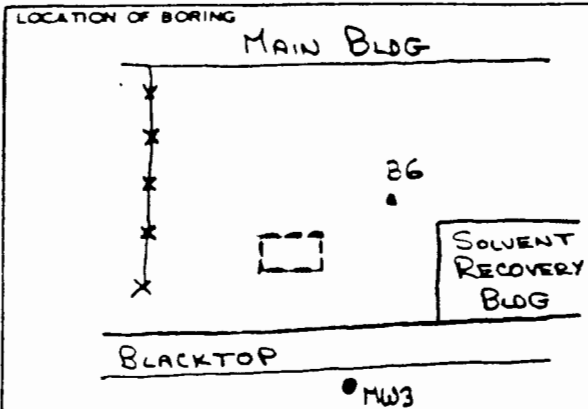
[Signature]

DRILLING CONTR. BEECHWOOD
MT. LAUREL, NJ

No. 68674

BY WKC DATE _____
CHK'D BY _____

1-21 (REV. 11-80)



JOB NO. 15258-004		CLIENT HORSHAM VALLEY DEVEL. CORP.		LOCATION MONTGOMERYVILLE PA	
DRILLING METHOD: NA				BORING NO. B6	
SAMPLING METHOD: SPLIT SPOONS - CONTINUOUS				SHEET 1 OF	
WATER LEVEL 5'6"				START TIME 10:30	
TIME 10:50				FINISH TIME 10:50	
DATE 5/7/87				DATE 5/7/87	
CASING DEPTH				→	

DATUM HNW ELEVATION

SAMPLER TYPE	INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO DEPTH	BLOWS/FT SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH
						0	
						1	B6-1
						2	
						3	
						4	B6-2
						5	
						6	B6-3
						7	
						8	
						9	
						0	
						1	
						2	
						3	
						4	
						5	
						6	
						7	
						8	
						9	
						0	

SURFACE CONDITIONS:

GRASS

MOTTLED BROWN SILTY CLAY (dry)

BROWN SILTY CLAY / WEATHERED ROCK
SHALES FRAGMENTS (DRY)

SAME, IRON STAINS ON FRACTURED
SHALES

REFUSAL AT 6.5'

HNW IN HOLE - <1

James Cook

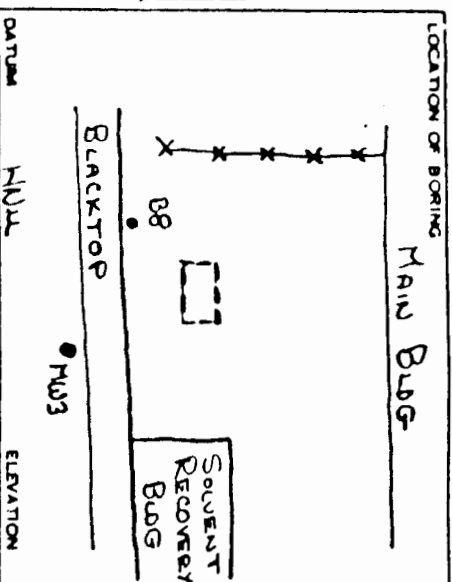
BY PKC
DATE _____ CHK'D BY _____

No. 68674

DRILLING CONTR. BEECHWOOD
MT. LAUREL, NJ

1 (3) (REV 11-80)

SAMPLER TYPE	INCHES DRIVEN	INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO	SAMPLE DEPTH	BLOWS/FT SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH
								0	B8-1
								1	
								2	
								3	B8-2
								4	B8-3
								5	
								6	
								7	
								8	
								9	
								0	
								1	
								2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
								0	
								1	
								2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
								0	



JOB NO. 15258-004 CLIENT HOGESMAN VALLEY DEVELOPMENT CO. INC. LOCATION MONTGOMERYVILLE PA

DRILLING METHOD: UA BORING NO. B8

SAMPLING METHOD: SPLIT SPOONS - CONTINUOUS SHEET 1 OF 1

WATER LEVEL: 3'6" START TIME: 1:00 FINISH TIME: 1:20

DATE: 5/7/87 DATE: 5/7/87

CASING DEPTH: _____

SURFACE CONDITIONS: GRASS

DARK BROWN GRADING DOWNWARD TO
BLACK SILTY CLAY / WEATHERED ROCK
w/ BROKEN SHALE (DRY)
STRONG SOLVENT ODOR 1-3'

GRAY BLACK SILTY CLAY / WEATHERED ROCK
SOLVENT ODOR (WET)
BLACK WEATHERED SHALE (DRY)

REFUSAL AT 5'

MW IN HOLE - 200

OBSERVATION - CLAY / WEATHERED ROCK
IS GRAY TO BLACK WHERE SOLVENT
IS HIGH

David C. Carr

No. 68674

DRILLING CONTR. BEECHWOOD
MT. LAUREL NJ

LOCATION OF BORING
Main Bldg

15258-004	JOB NO
HOESMAN Valley Dewell Corp.	CUSTOMER
MONTGOMERY WUE Bk	LOCATION

DRILLING METHOD

28

SAMPLING METHOD

SPLIT SPOONS - CONTINUOUS

WATER

WATER L3

TIME

DATE _____

CASING DI

SURFACE CONDITIONS:

Grass

Dark Gray Clay w Shale Fragments,
Day

4. SALE CONSENT ORDER, WET AT

Revised At 51
H.N. In Hole - 2

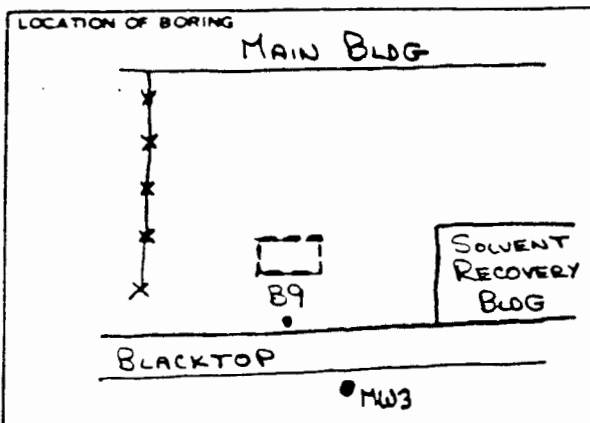
Bob Carr

DRILLING CONTR BEECHWOOD
MT. LAUREL, NJ

No.68674

BY VKS

DATE _____ CHK'D BY _____



JOB NO 15258-004		CLIENT HORSHAM VALLEY DEVEL. CORP.		LOCATION MONTGOMERYVILLE PA	
DRILLING METHOD: NA				BORING NO. B9	
SAMPLING METHOD: SPLIT SPOON - CONTINUOUS				SHEET 1 OF 1	
WATER LEVEL 4'8"				START TIME 1:30	FINISH TIME 1:50
TIME 1:50				DATE 5/7/87	DATE
DATE 5/7/87					
CASING DEPTH					

DATE		H2O		ELEVATION			
SAMPLER TYPE	INCHES DRIVER INCHES RECORDED	DEPTH OF CASING	SAMPLE NO SAMPLE DEPTH	BLOWS/FT SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH
						0	
		10				1	B9-1
						2	
						3	
		200				4	B9-2
						5	
						6	
						7	
						8	
						9	
						0	
						1	
						2	
						3	
						4	
						5	
						6	
						7	
						8	
						9	
						0	

SURFACE CONDITIONS:

GRASS

MOTTLED BROWN SILTY CLAY WITH
LOT OF BROKEN SHALE (DRY)

WEATHERED GRAY SHALE (DRY)

REFUSAL AT 4'10"

H2O IN HOLE - 200

OBSERVATION - ORANGE LIQUID AT
BOTTOM OF HOLE MAY BE FLOATING
SOLVENT PHASE - VERY HIGH VOC

[Signature]

BY DKC

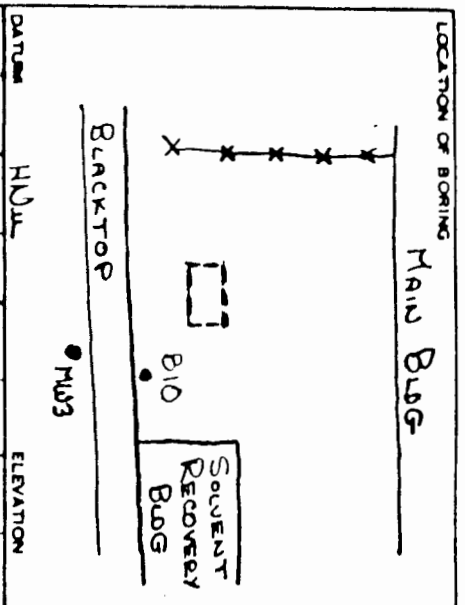
No.68674

DRILLING CONTR BEECHWOOD
MT. LAUREL, NJ

1 (3) (REV 11-80)

DATE _____ CHK'D BY _____

SAMPLER TYPE	INCHES DRIVEN	INCHES RECOVERED	DEPTH OF CASING	SAMPLE NO	SAMPLE DEPTH	BLOWS/FT. SAMPLER	NUMBER OF RINGS	DEPTH IN FEET	SOIL GRAPH
								0	
								1	BIO-1
								2	
								3	BIO-2
								4	
								5	
								6	
								7	
								8	
								9	
								0	
								1	
								2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
								0	
								1	
								2	
								3	
								4	
								5	
								6	
								7	
								8	
								9	
								0	



JOB NO 15258-004

CUSTOMER HORSNAN VALLEY

LOCATION MONTGOMERY HILL

DRILLING METHOD: NA

SAMPLING METHOD: SPLIT SPOON - CONTINUOUS

WATER LEVEL: DRY

TIME: 2:00

DATE: 5/7/87

CASING DEPTH: 5/7/87

START TIME: 2:00

FINISH TIME: 2:30

DATE: 5/7/87

DATE: 5/7/87

SHEET 1 OF 1

DRILLING

GRASS

8" BROWN SILTY CLAY TOP SOIL

REMAINDER - BROWN MOTTLED SILTY CLAY / WEATHERED ROCK (SHALE), DRY

BROWN TO GRAY WEATHERED SHALE (DRY)

REFUSAL - 4'6"

MIN IN HOLE - <1

DATE 5/7/87

Data Evaluation

For the purpose of evaluating the ground water analytical data, the priority pollutant levels detected at Building No. 2 are compared to corrective action levels in ground water, as established by the New Jersey Department of Environmental Protection (NJDEP), Bureau of Industrial Site Evaluation. These corrective action levels were promulgated pursuant to New Jersey's Environmental Cleanup Responsibility Act (ECRA), and will hereinafter be referred to as ECRA action levels. The Commonwealth of Pennsylvania, as of the date of this report, does not have specific corrective action levels for industrial sites but House Bill No. 1574 is presently pending; hence, ECRA action levels are used in evaluating ground water analytical data for Building No. 2.

Based on the laboratory results, the ground water samples obtained for this investigation contain only trace quantities of five of the thirteen priority pollutant metals. The levels detected are very low, approaching analytical detection limits and are not considered to represent adverse environmental impacts. dk

Priority pollutant volatile organic compounds (VOC's) were detected in all four ground water samples. Samples obtained from MW-2, MW-4 and MW-5 contained a combined total of five volatile organic compounds. The levels of VOC's detected in these three wells are low and do not represent significant adverse environmental impacts. However, monitoring well MW-3 contained significant levels of trans-1,2-Dichloroethene (1075 ug/l), Trichloroethene (636.4 ug/l), Vinyl Chloride (82.6 ug/l), and 1,2-Dichloroethane (26.8 ug/l). These levels are considered to represent adverse environmental impacts. This well is located downgradient of Building No. 2 as indicated by the water table elevations recorded on March 17, 1987 (Table 1). Ground water appears to flow in a south-southeasterly direction. The concentrations of VOC's detected in MW-3, indicate an upgradient source. Based upon our knowledge of the site and our review of two closure reports furnished to us by HVDC for a previous study (Report, Pre-Acquisition Environmental Audit, Industrial/Manufacturing Building, Montgomeryville, Pennsylvania - Dames & Moore, March 5, 1987), it is our opinion that the source of the contaminants detected in MW-3 is contaminated soil present in the vicinity of the waste treatment plant and the former bulk solvent storage area. The areal and vertical extent of the contaminated soil can not be evaluated with the available information.

* need to see these reports.
vertical extent?
* What wastes were disposed/stored in tank...

We recommend that the areal and vertical extent of the contaminated soil be evaluated, in order to evaluate potential costs for remedial action at the site. As we discussed, we will present remedial investigations and cleanup options and their associated costs at a meeting during the week ending April 17, 1987.

We appreciate the opportunity to be of service. If you have any questions, please call.

Very truly yours,

DAMES & MOORE

✓ *Thor Helgason*

Thor Helgason
Project Manager

✓ *David K. Cook*

David K. Cook
Associate

TH/DKC:jw

0802R

**59. November 2, 1987 Letter from PADEP to HVDC Regarding
Groundwater Contamination**

Provided by: PADEP



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
1875 New Hope Street
Norristown, PA 19401
215 270-1948

Imp-21
Mont. Twp.
Mont. Co.
Correspondence
wr

November 2, 1987

Mr. Ken Bissinger
Horsham Valley Development Corporation
107 Lakeside Drive
Horsham, PA 19044

Re: Solid State Scientific, *Inc.*
Montgomeryville
Montgomery County

Dear Mr. Bissinger:

The Department's technical staff has completed a review of your company's report and work plan and offer the following comments:

Information provided by the consultant (Thor Helgason of Dames and Moore) revealed that an unknown prospective property owner installed four wells at the site. Subsequent ground water sampling revealed the volatile contamination in well 3. The solvents apparently originated in an underground tank used to store waste solvent from an electroplating operation. A closure plan was developed and carried out: Removal of the tank and its piping took place.

The Department concurs with the consultant's position to remove soil from the areas around well No. 3.

Furthermore the work plan and report are approved with the following exceptions.

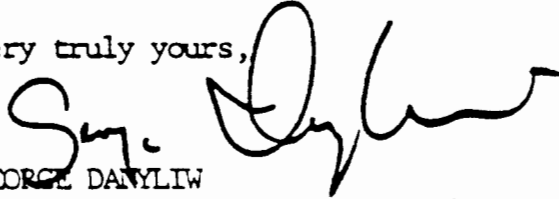
1. The Bureau of Dams and Waterways should be notified of the soil removal activity near a stream; contact person Mr. John Smith (215-584-5566).
2. The voids encountered in boring 5 should be explained;
3. In task 6 of the work plan, regardless of the screening process used to identify contamination, soil removal should continue until 1 ppm total volatile organics remain in the soil.
4. Material used for backfilling should minimize infiltration of runoff into the area.

Mr. Ken Bissinger
November 2, 1987

- 2 -

If you have any further questions concerning this matter, please contact Sarah Pantelidou or the undersigned at the above number.

Very truly yours,

A handwritten signature in black ink, appearing to read "George Danyliw", written over the printed name.

GEORGE DANYLIW
Solid Waste Operations Supervisor

cc: Ms. Pantelidou
Ms. Quigley
Mr. Smith
Re 30 (SMC)302.2

**60. September 15, 1987 Letter from Dames & Moore to USEPA
regarding Request for EPA I.D. Number**

Provided by: USEPA



DAMES & MOORE

A PROFESSIONAL LIMITED PARTNERSHIP

1610 STREET 1000, CLEVELAND, OHIO 44114 (216) 364-7910

*file in → SOLID STATE SCIENTIFIC
PAID 00 227 8331*

September 15, 1987

RFD # 18

United States Environmental Protection Agency
Waste Management Branch
841 Chestnut Street
Philadelphia, Pennsylvania 19107

Attention: Mr. Garth Conner

Re: Request for EPA I.D. Number
Horsham Valley Development Corp.
Horsham, Pennsylvania

Dear Mr. Conner:

The purpose of this letter is to request, on behalf of our client, Horsham Valley Development Corp (HVDC), an EPA I.D. Number. This request is made pending identification and listing, under 40 CRF Part 261, of approximately 250 tons of in-place contaminated soil on property recently purchased by HVDC. HVDC, although in no way responsible for creating or contributing to the creation or existence of the contaminated soil, fully intends to remove and properly dispose of the soil from the property. To accomplish this, an EPA I.D. Number is necessary, as HVDC will become a one-time generator.

Your response to this request will be greatly appreciated. If you have any questions, please contact me.

Very truly yours,

DAMES & MOORE
A Professional Limited Partnership

Thor Helgason

Thor Helgason
Project Engineer

TH:jw

cc: Ken Bissinger - HVDC

1303R

*Put in Solid State file
per item listed
9/24/87*

**EPA Notification of Hazardous Waste Activity**United States Environmental Protection Agency
Washington, DC 20460Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).**For Official Use Only**

Comments

C

C

Installation's EPA ID Number

Approved

Date Received
(yr. mo. day)

C

T/A C

F

1

I. Name of Installation

HORSHAM VALLEY DEVELOPMENT CORPORATION - BUILDING NO. 2

II. Installation Mailing Address

Street or P.O. Box

C

3

200 GIBRALTAR RD.

City or Town

State

ZIP Code

C

4

HORSHAM

PA

19044

III. Location of Installation

Street or Route Number

C

5

160 COMMERCE DR.

City or Town

State

ZIP Code

C

6

MONTGOMERYVILLE

PA

18936

IV. Installation Contact

Name and Title (last, first, and job title)

Phone Number (area code and number)

C

2

KEN BISSINGER - VICE PRESIDENT

215

675

5456

V. Ownership

A. Name of Installation's Legal Owner

B. Type of Ownership (enter code)

C

R

HORSHAM VALLEY DEVELOPMENT CORPORATION

P

VI. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)**A. Hazardous Waste Activity****B. Used Oil Fuel Activities**

- ☒ 1a. Generator ☐ 1b. Less than 1,000 kg/mo.
☐ 2. Transporter
☐ 3. Treater/Storer/Disposer
☐ 4. Underground Injection
☐ 5. Market or Burn Hazardous Waste Fuel
(enter 'X' and mark appropriate boxes below)
☐ a. Generator Marketing to Burner
☐ b. Other Marketer
☐ c. Burner

- ☐ 6. Off-Specification Used Oil Fuel
(enter 'X' and mark appropriate boxes below)
☐ a. Generator Marketing to Burner
☐ b. Other Marketer
☐ c. Burner
☐ 7. Specification Used Oil Fuel Marketer (or On site Burner)
Who First Claims the Oil Meets the Specification

VII. Waste Fuel Burning: Type of Combustion Device (enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.)☐ A. Utility Boiler☐ B. Industrial Boiler☐ C. Industrial Furnace**VIII. Mode of Transportation (transporters only — enter 'X' in the appropriate box(es))**☐ A. Air ☐ B. Rail ☐ C. Highway ☐ D. Water ☐ E. Other (specify)**IX. First or Subsequent Notification**

Mark 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

☒ A. First Notification ☐ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number

ID — For Official Use Only																
C															T/A	C
W																1

X. Description of Hazardous Wastes (continued from front)

A. Hazardous Wastes from Nonspecific Sources. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from nonspecific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
7	8	9	10	11	12

B. Hazardous Wastes from Specific Sources. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. Commercial Chemical Product Hazardous Wastes. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. Listed Infectious Wastes. Enter the four-digit number from 40 CFR Part 261.34 for each hazardous waste from hospitals, veterinary hospitals, or medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54
----	----	----	----	----	----

E. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. (See 40 CFR Parts 261.21 — 261.24)

☐ 1. Ignitable
(D001)

☐ 2. Corrosive
(D002)

☐ 3. Reactive
(D003)

☐ 4. Toxic
(D000)

XI. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature

Name and Official Title (type or print)

Date Signed

Kenneth A. Bissinger
Vice President

KEN BISSINGER - VICE PRESIDENT

SEPTEMBER 15, 1987

61. January 21, 1988 Desk Memorandum regarding Site Visit

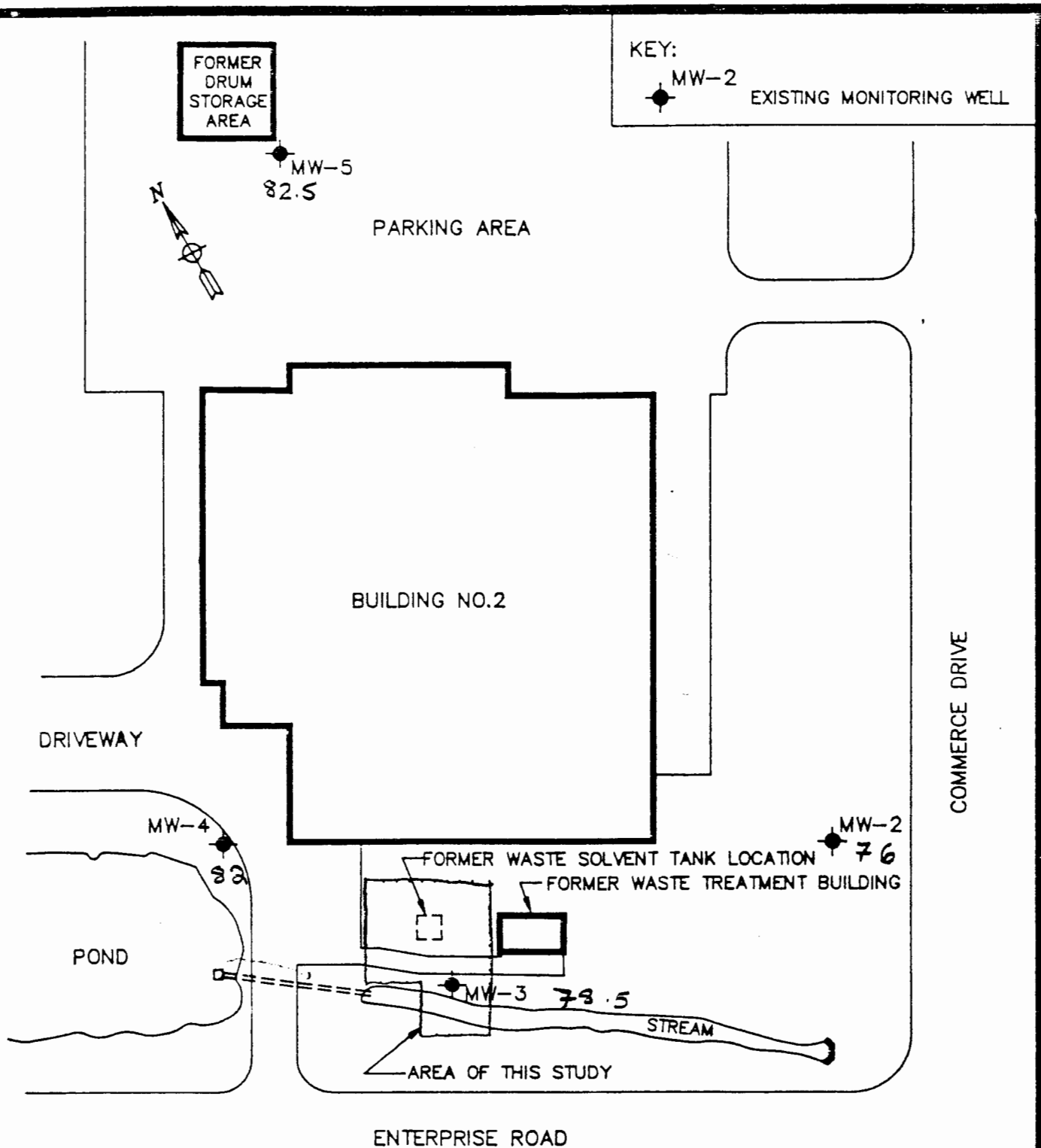
Provided by: PADEP

DESK MEMORANDUM

SUBJECT S.S.S, Inc.					
TO File			FROM Sam		
DATE SENT 1/21/88			DATE NEEDED		
PLEASE CALL:	APPROVAL		SEE ME		
RETURNED YOUR CALL	AS REQUESTED		COMMENT		
✓ INFORMATION & FILE	PREPARE REPLY/REPORT		NOTE AND RETURN		
NECESSARY ACTION	SIGNATURE				
RECEIVED BY		DATE	TIME		
ROUTE	INITIAL	DATE	ROUTE	INITIAL	DATE

MESSAGE:

Site visit 1/21/88 with Carol Quigley;
Met w) Thor H. + Blake M. of Dames +
Moore. They're excavating a 30' x 30' x 4' deep
hole to bedrock w) backhoe + bucket.
Are limited by stream + blg. foundations.
C. Quigley will discuss cleanup
levels with George.....
We need to see results below or = 1 ppm
Can backfill

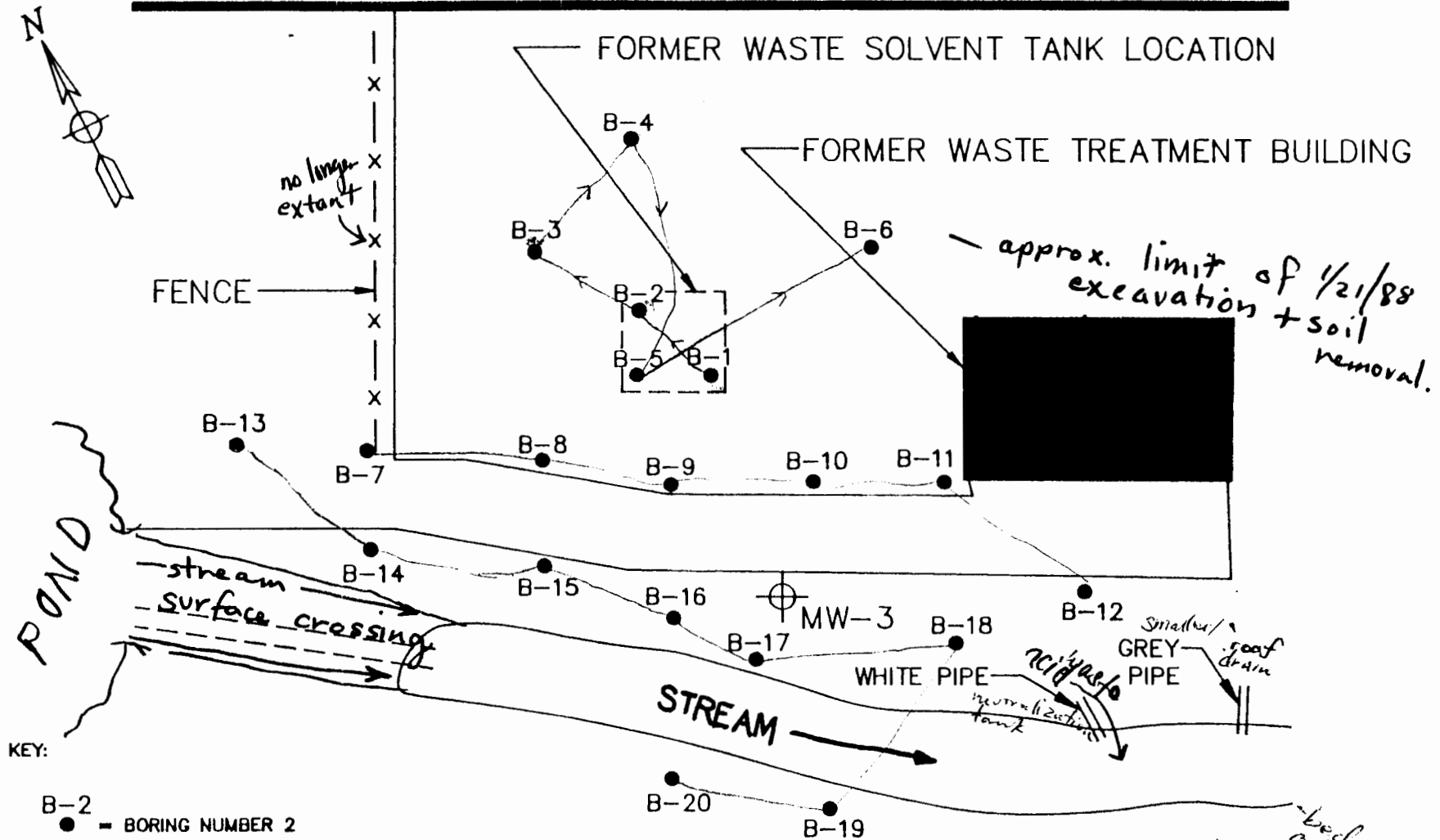


PLOT PLAN SHOWING MONITORING WELL LOCATIONS
AND STUDY AREA

SSSI BUILDING NO.2
MONTGOMERYVILLE, PENNSYLVANIA
(NOT TO SCALE)

Dames & Moore
FIGURE 1

BUILDING NO. 2



KEY:

B-2 = BORING NUMBER 2

*background boring
B-13*

BORING LOCATION PLAN VICINITY OF MONITORING WELL MW-3

SSSI BUILDING NO.2
MONTGOMERYVILLE, PENNSYLVANIA

APPROXIMATE SCALE: 1" = 10'-0"

Dames & Moore

FIGURE 2

62. May 22, 1985 Storch Engineers Field Report #2

Provided by: ALLEGRO

STORCH ENGINEERS

220 RIDGEDALE AVENUE, P.O. BOX 267, FLORHAM PARK, NJ 07932

(201) 822-2600

Field Report No. 2, S.E. #1559

May 22, 1985

Site Location: Building No. 2 Weather: Sunny
Solid State
Scientific, Inc. (SSSI) Temp: 75°
Montgomeryville, PA Winds: Southerly

The purpose of being on site this date was to observe the removal of the waste solvent tank and sample the soil beneath the gravel bedding at the bottom of the pit, and to observe the removal of bituminous pavement and pavement subgrade subject to contamination from chemical spills in the drum storage area and obtain a soil sample from beneath the twelve inches of subgrade soil to be removed with the pavement.

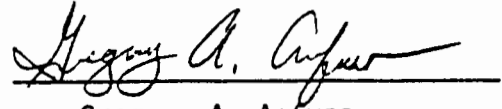
I arrived at the site at 9:45 am. Three technicians from AETC were opening drums stored in the drum storage area and Lelf Liberg was evaluating the entrance into the drum storage area. A John Deere backhoe model JD410 was sitting on the trailer on which it had been shipped on.

Lelf had refused the use of this backhoe since the cab height would not permit the backhoe to have the necessary roof clearance for the backhoe to enter the drum storage area. The backhoe was shipped without a dipper bucket and was incapable of excavating without it.

The backhoe was returned and an attempt was made to rent a backhoe from Case Industries located about one half of a mile from the site. A backhoe was available, but could not be delivered to the site as it was not licensed for road travel and no tractor trailers were available. An attempt was made to obtain a police escort for the backhoe, but the Chief of Police was not available to approve the police escort.

The waste solvent pit had approximately 4" of water in it which accumulated from ground water and rain water the night before.

I left the site at 11:00 am.


Gregory A. Anfuso,

63. May 23, 1985 Storch Engineers Field Report #3

Provided by: ALLEGRO

STORCH ENGINEERS

220 RIDGEDALE AVENUE, P.O. BOX 267, FLORHAM PARK, NJ 07932

(201) 822-2600

Field Report No. 3, S.E. #1559

May 23, 1985

Site Location: Building No. 2 Weather: Rain
Solid State Temp: 65°
Scientific, Inc. (SSSI) Winds: Westerly
Montgomeryville, PA

The purpose of being on site this date was to collect the soil samples following the excavation of the bituminous pavement and soil subgrade in the drum storage area and the removal of the waste solvent storage tank in the timber walled pit.

I arrived at the site at 12:15 pm. The excavation of a portion of the drum storage area and the removal of the waste solvent storage tank had been completed with a Case 580E backhoe.

Josephine Hlstand of SSSI and Lelf Liberg and Hal Grant of AETC were present at the site in Building 2 upon my arrival. We proceed to the southerly side of the site where the timber walled solvent storage pit was located. Lelf placed the Trident submersible pump into the pit to pump out the accumulated rainwater and ground water.

We then proceeded to the drum storage area to review the area excavated. Lelf Liberg stated that the 2" pavement and 12" to 16" of soil removed below were done under the direction of Hal Grant of AETC. Excavation was done in the southerly quadrant of the area since the area slopes in that direction. There was some dark staining on the pavement on the easterly side of the area excavated, but Lelf stated there was no cause for concern over these stains. All excavated materials had been placed in a covered dumpster trailer.

Lelf, Hal and Josephine left the site at approximately 12:50 pm.

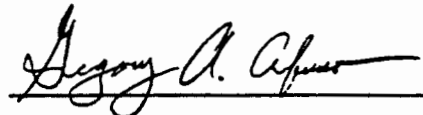
I went into the drum storage area after suiting up for protection from possible hazards and used the trowel to obtain soil from 3 locations in

the excavated portion (see figure 1) of the area for sample SSSI-2 which is to be tested for EP toxicity metals, ignitability, reactivity and corrosivity. There was a seam of gray clayey material that differed from the red-brown clayey soil in the area. A portion of the gray material was included in the sample since it was located at a depth of 12" below the pavement under the asphalt berm. The material seemed to extend beyond the limits of the drum storage area.

After cleaning the trowel, I went to the waste solvent storage pit to obtain sample SSSI-3. I had left instructions with Lelf Liberg on the previous day to have the backhoe excavate through the gravel bottom of the pit in three locations (see figure 2). The samples were obtained with the trowel in the three locations. The soil below the angular gravel in the pit was a fractured shale with sandy clay in the seams. Ground water was running through the shale and the angular gravel. Use of the pump in each small excavated area was required in order to obtain the sample.

Following the cleanup and storage of the equipment, I left the site at 3:00 pm.

Samples SSSI-2 and SSSI-3 were packaged and sent out this day via Federal Express by Dave Scaturro.

A handwritten signature in dark ink, appearing to read "Gregory A. Anfuso", written over a horizontal line.

Gregory A. Anfuso,

**64. December 19, 1991 Operating Permit #46-318-023
(1st page only)**

Provided by: MOYCO

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
FIELD OPERATIONS - AIR QUALITY CONTROL

OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the rules and regulations of the Department of Environmental Resources, the Department hereby issues this permit for the operation of the air contamination source(s) described below.

Permit No.	<u>46-318-023</u>	Source(s)	<u>Surface(Roll) Coater & Drying Oven</u>
Owner	<u>Moyco Industries, Inc.</u>	Air	<u></u>
Address	<u>200 Commerce Drive</u>	Cleaning	<u></u>
	<u>Montgomeryville, PA 18936</u>	Device	<u></u>
Attention	<u></u>	Location	<u>200 Commerce Drive</u>
	<u></u>		<u>Montgomeryville</u>
	<u></u>		<u>Montgomery County</u>

This permit is subject to the following conditions:

1. That the source(s) and any associated air cleaning devices are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. in compliance with the specifications and conditions of the plan approval issued under the same number;
 - c. operated and maintained in a manner consistent with good operating and maintenance practices.
2. This permit is valid only for the specific equipment, location and owner named above.

(SEE THE ATTACHED ADDITIONAL CONDITIONS)

Failure to comply with the conditions placed on this permit is a violation of Section 127.25. Violation of this or any other provision of Article III of the rules and regulations of the Department of Environmental Resources will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued December 19, 1991

Expires December 31, 1992

N. Rao Kona
N. RAO KONA
Regional Air Pollution Control Engineer

Central Office
Southeast Regional Office

**65. January 22, 1992 Operating Permit #46-318-022
(1st page only)**

Provided by: MOYCO

OPERATING PERMIT

Permit No.	<u>46-318-022</u>	Source(s)	<u>Surface(Roll) Coater&Drying Oven</u>
Owner	<u>Moyco Industries, Inc.</u>	Air	<u></u>
Address	<u>200 Commerce Drive</u>	Cleaning	<u>.</u>
	<u>Montgomeryville, PA 18936</u>	Device	<u>.</u>
Attention	<u></u>	Location	<u>200 Commerce Drive</u>
	<u></u>		<u>Montgomeryville</u>
			<u>Montgomery County</u>

1. That the source(s) and any associated air cleaning devices are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. in compliance with the specifications and conditions of the plan approval issued under the same number;
 - c. operated and maintained in a manner consistent with good operating and maintenance practices.
2. This permit is valid only for the specific equipment, location and owner named above.

Central Office
Southeast Regional Office

**66. December 5, 1997 Operating Permit #46-318-038
(1st page only)**

Provided by: MOYCO

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FIELD OPERATIONS - BUREAU OF AIR QUALITY

OPERATING PERMIT

(REVISED 3/15/99)

In accordance with provisions of the Air Pollution Control Act, the act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the Rules and Regulations of the Department of Environmental Protection, the Department hereby issues this permit for the operation of the air contamination source(s) described below:

Permit No.	<u>46-318-038</u>	Source(s)	<u>Surface Coating Facility</u>
Owner	<u>Moyco Technologies, Inc.</u>	Air	<u>Thermal Oxidizer</u>
Address	<u>200 Commerce Drive</u>	Cleaning	<u></u>
	<u>Montgomeryville, PA 18936</u>	Device	<u></u>
Attention	<u>Mr. C. Picardi</u>	Location	<u>200 Commerce Drive</u>
	<u>Director of Technology</u>		<u>Montgomery Township</u>
			<u>Montgomery County</u>

This permit is subject to the following conditions:

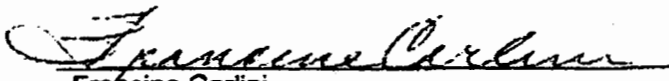
1. That the source(s) and any associated air cleaning devices are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. in compliance with the specifications and conditions of the plan approval issued under the same number;
 - c. operated and maintained in a manner consistent with good operating and maintenance practices.
2. This permit is valid only for the specific equipment, location and owner named above.

(SEE ADDITIONAL CONDITIONS ATTACHED)

Failure to comply with the conditions placed on this permit is a violation of Section 127.444. Violation of this or any other provision of Article III of the Rules and Regulations of the Department of Environmental Protection will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued 12/05/1997

Expires 12/05/2002


Francine Carlini
Regional Manager
Air Quality

cc: Division of Permits, RCSOB
Administration
SEFO
Re (GJC)250-6

67. October 13, 1987 PADEP review of SSS Report and Work Plan

Provided by: USEPA

COMMONWEALTH OF PENNSYLVANIA
Environmental Resources
October 13, 1987
8-354-1948

SUBJECT: Review of Solid State Scientific, Inc.
Report and Work Plan
Montgomeryville, Montgomery County

TO: BRUCE D. BEITLER
Operations Supervisor

Thru: LAWRENCE H. LUNSK
Waste Management Facilities
Supervisor

FROM: SARAH PANTELIDOU *sp*
Hydrogeologist

I have reviewed the report and work plan and my comments follow:

Information provided by the consultant (Thor Helgason of Dames and Moore) revealed that an unknown prospective property owner installed four wells at the site. Subsequent ground water sampling revealed the volatile contamination in well 3. The solvents apparently originated in an underground tank used to store waste solvent from an electroplating operation. A closure plan (approved by DER?) was developed and carried out: Removal of the tank and its piping took place. Dames and Moore's position is that additional soil should be removed from the area around Well 3. I agree.

The report and work plan are approved with the following exceptions:

1. The Bureau of Dams and Waterways should be notified of the soil removal activity near a stream;
2. The voids encountered in boring 5 should be explained;
3. In task 6 of the work plan, regardless of the screening process used to identify contamination, soil removal should continue until 1 ppm total volatile organics remain in the soil.
4. Material used for backfilling should minimize infiltration of runoff into the area.

cc: George Danyliw, Field Supervisor
John Smith, Bureau of Dams and Waterways
Marilyn Shup, Field Supervisor, Water Quality
Re 30 (DAC)286

vs/p

**68. April 16, 1975 Letter from SSS to PADEP Regarding Tank and
Contaminated Soil**

Provided by: PADEP



SOLID STATE SCIENTIFIC INC.

MONTGOMERYVILLE PENNA 18938

215-855-8400

TX 510-681-7265

APR 16, 1975

APR 18 1975

WATER
NORRISTOWN REGIONAL

Mr. Stephen F. Pedersen
Environmental Protection Specialist
Dept. of Environmental Resources
1875 New Hope Street
Norristown, Pa. 19401

Dear Mr. Pedersen:

I wish to thank you for your help this morning on the phone pertaining to the public notice.

A public notice worded per your suggestion has been placed in The Bulletin and will run for four (4) weeks. I have requested a Proof of Publication form from the newspaper publisher. At the end of the 4th week the paper will supply me with the proper affidavit.

To bring you up to date, the old tank and contaminated soil has been removed on schedule and disposed of properly. In my opinion, we have now complied with everything that you have suggested in your letter of March 24, 1975, with the exception of the permit which is being worked on.

Thank you for your help in this matter.

Yours truly,

M. R. Kapell
Manager of Plant & Industrial
Engineering

